REPORT RESUMES

ED 016 946

SYSTEMATIC RELATIONS OF STANDARD AND NON-STANDARD RULES IN
THE GRAHMARS OF NEGRO SPEAKERS.

SY-LABOV, WILLIAM COHEN, PAUL
COLUMBIA UNIV., NEW YORK
REPORT NUMBER BR-5-0545

CONTRACT OEC-6-20-059
EDRS PRICE MF-\$0.25 HC-\$0.84

19P.

DESCRIPTORS. *GRAMMAR, *PHONOLOGY, *MORPHOLOGY (LANGUAGES), STANDARD SPOKEN USAGE, ENGLISH, NONSTANDARD DIALECTS, *NEGRO DIALECTS, AGE DIFFERENCES, LOWER CLASS, MIDDLE CLASS, *SOCIAL DIALECTS, LANGUAGE ABILITY, SURFACE STRUCTURE, PHRASE STRUCTURE, SOUTH CENTRAL HARLEM,

THIS PAPER DISCUSSES THE INTERSECTION OF THE NONSTANDARD ENGLISH DIALECT OF THE URBAN GHETTOS AND STANDARD ENGLISH. THE AUTHORS DRAW ON SOME PRELIMINARY DATA GATHERED IN PERSONAL INTERVIEWS, INCLUDING A RANDOM SAMPLE OF 100 LOWER-AND HIDDLE-INCOME ADULTS IN THREE AREAS OF SOUTH CENTRAL HARLEM. ALTHOUGH NEGRO SPEECH PATTERNS HAVE BEEN EXPLAINED AS THE PRODUCT OF DIALECT MIXTURE OF TWO ORIGINALLY UNIFORM GRAMMARS, THESE DATA DO NOT SUPPORT SUCH A CONSTRUCT. RULES ARE DESCRIBED WHICH EMBODY CONTINUOUS VARIATION AT ALL AGE LEVELS, AS WELL AS OTHER RULES REPRESENTING ADJUSTMENTS IN CONDITIONS ON STANDARD RULES WHICH HAVE PROVED UNSTABLE IN THE HISTORY OF ENGLISH. GENERALLY, THE AUTHORS' INVESTIGATIONS SO FAR INDICATE THAT DIFFERENCES BETWEEN THIS DIALECT AND STANDARD ENGLISH ARE GREATER ON THE SURFACE THAN IN THE UNDERLYING GRAMMATICAL STRUCTURE. THIS REPORT WAS PRESENTED AT THE "7TH PROJECT LITERACY CONFERENCE, CAMBRIDGE, MASSACHUSETTS, MAY 25, 1967" AND APPEARS IN "PROJECT LITERACY REPORTS NUMBER 8," CORNELL UNIVERSITY, 1967. (AUTHOR/JD)

BR-5-0545 PA 24

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT HECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

SYSTEMATIC RELATIONS OF STANDARD AND NON-STANDARD RULES IN THE GRAMMARS OF NEGRO SPEAKERS

Villiam Labov and Paul Cohen Columbia University

7th Project Literacy Conference, Cambridge, Mass.
May 25, 1967

"PERMISSION TO REPRODUCE THIS COMMENTED MATERIAL HAS BEEN GRANTED BY WILLIAM FABOR

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COMMENT OWNER."

In this paper, we will discuss the intersection of the non-standard vernacular of the urban ghettos and standard English, drawing on some preliminary data from our investigation. Although Negro speech patterns have been explained as the product of dialect mixture of two originally uniform grammars, our data do not support such a construct. We will describe some rules embodying continuous variation at all age levels, and others which represent adjustments in conditions on standard rules which have proved unstable in the history of English. The general indication of our work so far is that the differences between this dialect and standard English are greater on the surface than in the underlying grammatical structure.

Since the last Project Literacy Conference, we have continued our studies into the structural and functional conflicts between standard English and the non-standard vernacular of the urban ghettos. Perhaps one of the most difficult tasks, technically, was the completion of interviews with a random sample of 100 adults in three areas of South Central Harlem. The resistance to interviewing on the part of the most critical age groups (working class Negro men 20 to 30 years old) has reached a peak for many reasons, social and political, but by various devices we did succeed in completing the cells of our stratified sample: we are now able to compare subjects along the axes Northern vs. Southern, older vs. younger, middle class vs. working class², and male vs. female.

In these face-to-face interviews we utilized our knowledge of the culture and of the factors which control language behavior to stimulate a range of language behavior from most casual to most formal styles. Many of the questions were focused upon the intersections of two or more of the "focal concerns" of lower class culture in general and also the particular concerns of the Negro people. We are analyzing these materials with particular attention to the functions

for which verbal skills are positively evaluated. More immediately, we have been able to draw from these interviews a complex set of quantitative phonological and morphological variables which display the general sociolinguistic structure of the speech community. Table 1 shows some preliminary figures derived from the phonological analysis of every fourth speaker in the sample. These three variables show similar systematic patterns in the white community, but at different levels and without the North-South complication. The (r) index is essentially the percentage of final and pre-consonantal

TABLE 1
THREE PHONOLOGICAL VARIABLES OF NON-STANDARD
NEGRO ADULTS IN SOUTH CENTRAL HARLEM

	Style	Raised in the <u>North</u>	Raised in the South	Middle Class	Working and Lower Class
(r)	Casual	00	07	13	03
	Careful	25	08	40	09
(dh)	Casual	151	79	45	123
	Careful	59	79	26	83
(ing)	Casual	28	04	00	14
	Careful	48	13	59	22

[r]; the (dh) index is constructed from the frequency of fricative, affricate and stop for morphophonemic th initially in this, then, that, etc. The higher the index number, the more non-standard forms are recorded. The (ing) variable is the percentage of <u>-in'</u> forms in all occurrences of unstressed <u>-ing</u>. Note that these three variables illustrate certain general principles:

l. In careful speech, the middle class speakers are much closer to the prestige norm than working class speakers.



- 2. Both working class and middle class speakers shift away from the prestige norm when they move from careful to casual speech,
- 3. The shift of the middle class speakers is more extreme: in casual speech they approach or surpass the working class in distance from the standard,
- 4. Speakers raised in the South do not participate in this set of sociolinguistic variables (<u>-ing</u> is an exception to this; here Southerners follow the same pattern at a lower level).

It is important to obtain a clear understanding of this sociolinguistic structure in approaching the more complex variables which are located at the intersection of phonological and grammatical rules, such as the simplification of consonant clusters. These are the elements which are probably most relevant to locating structural interference in reading problems. 5 For linguists who have been raised in the tradition of categorical rules without exceptions, there is a great temptation to regularize these variables by some bold abstraction from the data. It is simple to assume that such variation as shown in Table 1 is due to mechanical dialect mixture, external to linguistic struc~ ture, and that behind all this are two pure dialects: with stops for all the's, for example. Such an assumption is even more convenient in disposing of the frequent -ed forms which occur with apparent irregularity in this speech community. The process of inferring the rules for competence from the facts of performance is then simplified to the act of discarding inconvenient data. close study of adults, adolescents and pre-adolescents shows that such systematic variation occurs at all age it is an inherent part of the structure of the levels: language, and rules must be written to reflect this fact.

When we turn to the consonant cluster variables, we find a more intricate set of relations than those of



Table 1. Figure 1 shows the simplification of clusters ending in -t or -d. The percentage of simplification is given for casual speech and careful speech, for clusters followed by words beginning with a consonant, and those followed by words beginning with a vowel. The solid lines represent the working class speakers; the dashed lines, the middle class speakers. On the left, the diagram for monomorphemic clusters show a small stylistic shift for working class speakers, with the same slope for clusters before consonants as for clusters before vowels. But the middle class line for clusters before consonants moves sharply upward, approximating the position of the working class in casual speech. Note, however, that there is no such phenomenon for the middle class use of clusters before vowels. Here the percentage of simplification is low and does not rise sharply; we can interpret this lack of parallelism by noting that a pattern of simplification before consonants but not before vowels preserves the underlying forms of the words. If we say firs' thing but first of all, there is no doubt that the underlying form is In the right half of the diagram, the same general first. pattern can be observed, but at a much lower level. grammatical status of -ed is obviously important to both groups, since the position is lower and the slope of the lines is greater than for monomorphemic words. Furthermore, the middle class groups show a sharper downward shift than the working class. There is less of a tendency for the middle class to shift upward in casual speech to approximate the working class norm; that is, even before consonants we find no sharp stylistic increase in simplification. can argue here that the middle class group has a general constraint against the dropping of the grammatical formative -ed as a stylistic indicator. In these respects, the middle class

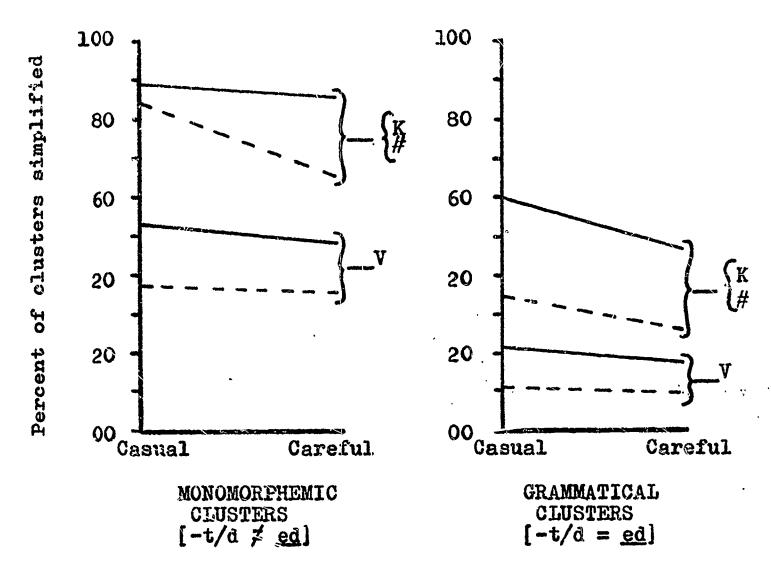


Fig. 1. The effects of style, class, grammatical status and phonetic environment on the simplification of consonant clusters ending in $\underline{t/d}$: some preliminary data from adults in South Central Harlem

The control of the commence of

ERIC

group approximates the behavior of white speakers as indicated in other studies.

The implications of these diagrams are that we have a truly continuous variable in the case of <u>-ed</u> which is conditioned by both internal and external factors. The <u>-ed</u> has grammatical status for all of the speakers we have dealt with, at all age levels, but the effect of this conditioning factor is much smaller for the rules governing working class speakers.

This is merely one of the general questions raised by the study of the phonological-grammatical intersection. It is worth noting here that not all of the variables studied behave in this continuous fashion. On the contrary, the evidence on the clusters ending in -s/z shows that we are dealing with discrete categorical differences for both pre-adolescents and adolescents. Whereas monomorphemic forms and plurals are intact and are affected only by stylistic phonological simplification, the third-person singular -s and regular possessive -s are missing entirely from the dialect in any systematic sense.

We find many such differences in grammatical formatives among the rules which oppose this non-standard dialect to standard English. For example, the dummy there in There's a difference is regularly it in It's a difference ence. A question of considerable interest, which was raised at the outset of these Project Literacy conferences, is whether similar or greater differences appear in the underlying phrase structure. Are the observed differences in surface structure indications of even greater differences in the deep structure, or merely the result of low-level realization rules, lexical inputs, phonological and late transformational rules? Our own investigations have regularly pointed to the latter



alternative. We have frequently encountered cases where sentences differ strikingly from standard English in their surface structure, yet in the final analysis appear to be the result of miner modifications of conditions upon transformational rules, or late stylistic options.

One of the most well-known characteristics of this dialect of English is the absence of the copula in the present before predicate nouns and adjectives, locatives and comitative phrases, and the parallel absence of the forms of to be in the auxiliary unit be...ing:

He a friend.

He with us.

He tired.

He working with us.

He over there.

This pattern is paralleled and reinforced by the frequent absence of is and are in questions: Why he here? He with you?

Some linguists would like to produce such sentences by phrase structure rules in which no copula or auxiliary is/sre appears. The arguments for and against the presence of these elements in the underlying phrase structure might be tabulated as follows:

For

- l. ain't appears in the negative:
 He ain't here.
- 2. <u>was</u> appears in the past:
 He was here.
- 3. <u>'m</u> remains in the lst person:
 <u>I'm here</u>.

Against

- l. <u>ain't</u> is merely a negative carrier, not a copula.
- 2. was is merely a past tense marker, not a copula.
- 3. I'm is an allomorph of I, found in equative sentences.



- 4. 's appears in that's, it's, what's [des,
- 5. be appears after modals, and in infinitival complements
- 6. is and are appear in tags, He ain't here, is he?
- 7. is and are are never deleted when they appear clause-finally in the surface structure, where standard English does not permit contractions: There he is, That's what you are, I'm smarter than he is.

- 4. These are single morphemes.
- 5. be represents the distinct verb found in He be good, as opposed to He good. 10
- 6. ?
- 7. ?

Of these arguments against the presence of the copula, (1) carries weight, and (2) is persuasive. But (3) and (4) carry less conviction, and (5) is extremely difficult to propose or follow, especially in view of the fact that there is only one form of the infinitive corresponding to the zero copula and be. Furthermore, we cannot conceive of any possible arguments to counter (6) or (7). (7) is particularly interesting, since it illustrates the intersection of phonelogical and grammatical factors which is so frequent in this area. It seems that the uncontracted forms do not disappear; it might also be noted that under emphatic stress, full forms of is, and are frequently appear where nothing is found in unemphatic sentences. 11 Similarly, we can note the extraordinary fact that the im is the only form of the copula which survives, and it is the only form not affected by the phonological processes that tend to reduce final clusters and eliminate final apical consonants.



If we accept the notion that the absence of the copula is due to a transformation which deletes the is or are in certain specified environments, the question arises as to the ordering of this transformation in relation to the rest of the grammar. Argument (6) is important here. deletion of the copula must follow the assimilation of -t. It seems reasonable that the deletion of the copula follows the assimilation of the t to the contracted form -s, since this extremely regular rule is a shared property of it's, what's and that's. This assimilation of t, one of the very general modes of consonant cluster simplification, must follow the rule which determines the phonetic form of the contracted is: otherwise we would have [dæz]. These and other considerations suggest that the deletion of is is a very late rule of the grammar, comparable to the lowest level phonological processes.

We could follow similar arguments on a more complex phenomenon, the non-standard Ain't nobody see it; ain't nobody hear it. This differs strikingly from standard English in that the order associated with questions (tense marker and first element of the auxiliary-noun phrasebalance of the verb phrase) is here used in a declarative statement, equivalent to standard Nobody saw it; nobody heard it. We cannot discuss this problem in detail here, but the general outline of the argument can be presented. We first note that this form occurs only with indefinite subjects. This suggests that it is associated with the negative concord rules which produce the well-known double negative pattern. For standard English, there is a rule which moves a negative element to combine with the first indefinite; for white non-standard English, a rule which distributes the negative to all the indefinite elements of the sentence. In the case of Ain't nobody see it, we have



a typical pleonastic form characteristic of negative concord: one negative element in the deep structure (one meaningful negative in this case) corresponding to two negatives in the surface structure.

In this case, the negative moves to the beginning of the sentence with the tense marker, and assumes the regular form ain't; it also distributes to anybody to produce nobody. Such a transposition of the negative might appear strange at first, until we consider the wide range of such phenomena in standard English. Adverbs which contain negative elements move with the tense marker to the beginning of the sentence as a regular stylistic device, with roughly the same emphatic (focus) significance as the non-standard form. Thus we get Never did he come here; Scarcely did I think so; Rarely would he do that. Finally, we can even find a standard parallel to the movement of the negative element plus tense marker without the adverb, in the more or less archaic Nor did anybody see him. considerations outlined here lead us to relate the the . non-standard Ain't nobody see him to the standard rules of negative attraction: first, as the absence of the limiting condition that negatives are distributed to the first negative only; second, as an extension of the rule that brings negative adverbs to the beginning of the sentence with reversal of auxiliary and subject (or more simply as a continuation of the archaic standard rule with different surface formatives). 12

Similar arguments bring us to the conclusion that sentences such as It ain't no cat can't get in no coop (= There isn't any cat which can get in any coop) are simple modifications and extensions of standard transformational rules.

We do not mean to imply that there are no differences in the underlying structure of the language of the Negro



speech community. There are two elements which appear immediately as candidates for independent phrase structure rules. One is the use of be to indicate generality, repeated action, or existential state in sentences such as He be with us; They be fooling around. We do not believe that there is any simple translation of standard rules which will produce these grammatical forms. such element is done to indicate an intensive or perfective meaning as in The bullet done penetrate my body; I done got me a bat. Both of these are part of an aspectual system which is plainly distinct from tense; still remains the problem of specifying their use and limitations precisely, and then relating them to the tense system. Since there is considerable disagreement on the relative roles of tense and aspect in the standard English verbal system, it is easy to understand why there is disagreement in this area.

In approaching these grammatical rules, it is not enough to determine their relative order and relation to standard English rules. We must also say something about their relative constancy within casual and spontaneous speech, the ease with which they alternate with other rules in formal speech, and their resistance to change or correction within the schoolroom situation. Of course these characteristics of the grammatical rules of non-standard English also bear upon their position in the grammar as a whole, as well as their importance in relation to reading problems.

One approach to this question is through the techniques that were used in the study of phonological variables cited above. A first step in studying syntactic patterns is to note the existence of particular forms of interest; a second step is to place them in the total population of



forms which represent the same meaning and with which they alternate. The definition of this class of complementary forms or rules is not simple in many cases; but we should certainly know how frequently pre-adolescents say He's here as opposed to He here and He be here, together with the frequency of the relevant adverbs and other contexts the elp define this alternation. In this case, and others, there is an inherent pattern of variation in standard dialect, not reducible to any constant or rule.

hessently, we have begun a series of investigations which lead more directly into the problem of estimating the firmness or depth of embedding of grammatical rules in the language of children. We have utilized the device of asking for instant repetitions of standard and non-standard sentences of varying length, which has been used effectively in studying much younger children. In this case, we have been working with a group of Negro boys, ages 11 to 14, whom we know quite well. We provide strong motivation for this task by various means, and obtain all the signs of strong effort to repeat the sentences back as heard. In general, we find that standard sentences of moderate length will be repeated without delay in the non-standard form if they contravene certain deeply embedded grammatical rules:

"I asked Alvin if he knows how to play basketball."

—"I aks Alvin do he know how to play basketball."

Even if the standard sentence is said very slowly, and repeated many times, we may obtain the non-standard form repeatedly from many of the speakers. However, this is not the result with cases where the non-standard rule seems to be relatively late in the grammar. For example, we regularly obtain such rejetitions as:

"Money, who is eleven, can't spit as far as Boo can."

- → "Money, who is eleven, can't spit as far as Boo can."
 "Larry is a stupid fool."
- "Larry is a stupid fool."

In fact, in our first series of tests, 21 out of 22 cases of were repeated back without omission. In contrast, half of the sentences with negatives and indefinites were repeated back with the non-standard forms.

In a later series, we found that sentences beginning with Nobody ever... were persistently produced as Nobody never... even after many repeated attempts. No difficulties whatever were found with the simple is of the copula. When we add this information, to our findings on the inherent variability of copula deletion in actual speech, and the structural arguments given above, we are forced to the conclusion that the presence or absence of is and are is governed by the operation of a low-level rule controlled by variable stylistic factors.

The behavior produced in response to the memory test leads us to a more far-reaching conclusion about the linguistic structure available to our subjects. We can ask, what linguistic competence is required to explain the rapid repetition:

- A "I asked Alvin if he knows how to play basketball."
- B "I aks Alvin do he know how to play basketball."

In the most obvious view, we can observe that the subject failed to perform the task required. But we cannot overlock the fact that B is the correct equivalent of A; it has the same meaning and is produced by the non-standard rule which is the nearest equivalent to the standard rule. In the standard form, the order of the yes-no question is re-reversed when it is embedded with the complementizer



if = 'whether or not'.

- (Al) I asked Alvin # Q he knows how to play basketball #
- (A2) I asked Alvin # Q does he know how to play basketball #
- (A3) I asked Alvin if he knows how to play basketball.

In the non-standard form, the order of the yes-no question is preserved when it is embedded without a complementizer.

- (B1) I aks Alvin # Q he knows how to play basketball #
- (B2) I aks Alvin # Q do he know how to play basketball #
- (B3) I aks Alvin do he know how to play basketball. Thus the original Q of the deep structure is represented in the standard sentence as <u>if</u>, and in the non-standard sentence as reversal of auxiliary and subject noun phrase. The non-standard rules differ from the standard only in the absence of the <u>if</u>-complementizer placement A3.

Since the listener does perform the translation, it is clear that he does understand the standard sentence. He then rapidly produces the correct non-standard equivalent B3. Understanding here must mean perception, analysis and storage of the sentence in some relatively abstract form. If the non-standard were converted to standard, it would mean the addition of the if-complementizer rule. But as standard is converted to non-standard, we can only infer that the perceived sentence is decoded at least to the depth of A2-B2 from the point of view of production, but at least to Al-Bl from the point of view of perception and understanding.

From these considerations, it is clear that the listener is perfectly competent in (at least this) aspect of the standard grammar. The over-all linguistic structure

which describes his competence is rather complex:

This asymmetrical situation is apparently well-formed in the sense that the listener-speaker will use this set of rules persistently and reliably as indicated in the test situation, and we can infer that his behavior in school is not very different as he decodes the teacher's speech production or printed texts in reading. We might speak of bilingualism, or bi-dialectalism and underline the parallel with the extraordinary performance of some bi-lingual speakers in effecting similar transformations. However, it seems to us that such terminology pre-judges the case. If all or a great majority of the standard rules were of the type A, and operated as a unitary system for the individual, then we would use the concept of "passive bi-lingualism" without hesitation. But there is no reason to believe that this is the case. On the contrary, the results of these and other investigations indicate that there is a wide variety of conditions relating standard and non-standard It is quite possible that for many speakers, the "A" rules which are incorporated into the asymmetrical situation outlined above, do not form a consistent sys-They may appear as individual variables within a single non-standard system. One of the aims of our study is to investigate this set of relations among rules, and to arrive at an over-all view of the linguistic structure involved. It seems plain to us that a clear differentiation of the rule systems involved is necessary to analyze the reading performance of children whose basic speech pattern is the non-standard vernacular.

In the first part of this paper, we showed that there are general principles which govern the phonological



shifting of middle class and working class speakers as they move towards and away from standard English. It may be argued that in Harlem both standard and non-standard rules are part of a larger linguistic structure which governs the shift between them. The data on syntactic behavior is not yet rich enough for us to show such systematic alternation, and we do not argue that it necessarily follows the same pattern. We do argue, however, that standard and non-standard syntactic rules can be shown to be variants of slightly more general rules. Furthermore, the competence of native speakers of the non-standard vernacular clearly includes the ability to perceive, abstract and re-produce the meaning of many standard forms which they do not produce. It is reasonable to assume that a single grammar can be constructed which accounts systematically for the syntactic variation inherent in all styles of the speech of this community.

FOOTNOTES

1. It is well known that younger lower class men form an unstable population and are poorly represented in random samples based on enumeration of residences. In the Mobilization for Youth survey of the Lower East Side of 1961 this group was most difficult, and the HARYOU survey of 1965 had even greater difficulties. Only 39 of the HARYOU sample interviews were with men; while the Census of 1960 showed 32 of Harlem families with incomes under \$3,000, only 12 of appeared in the HARYOU sample, and while only 15 of Harlem families had incomes over \$7,000, the HARYOU sample had 28 of . The fact that our interviewer, Mr. Clarence Robins, is Afro-American and native to the area did not eliminate the problem, and a number of devices were required to complete this cell in our sample.

The figures given in this paper are based on a rough first approximation to class status, based on residential area. We sampled three widely separated areas: one set of upper middle class, middle-income apartments, and two areas which included tenements and low-income apartments.

The devices used in the adult interview situation to elicit casual speech were essenitally those of the Lower East Side survey (Labov, William. The Social Stratification of English in New York City. Washington, D.C.: Center for Applied Linguistics, 1966. Chapter IV). However, it should be recognized that such techniques are only substitutes for more natural and effective means of controlling stylistic behavior. In working with adolescent and preadolescent boys, our samples of casual speech are drawn from the spontaneous interaction of natural peer groups in which each individual is recorded on a separate track.

4See Labov, op. cit., Ch. VII.

5The (dh) index is constructed by assigning (dh-1) to fricatives, (dh-2) to affricates, and (dh-3) to stops; the average numerical value is multiplied by 100, and 100 is subtracted from this figure, so that invariant use of fricatives will give (dh)-00.

Robins, A Preliminary Study of the Structure of English Used by Negro and Fuerto Rican Speakers in New York City, Final Report - Cooperative Research Project No. 3091, Office of Education, 1965; and Labov, William, "Some Sources of Reading Problems for Negro Speakers of Non-Standard English" New Directions in Elementary English (Alexander Frazier, Ed.), Champaign, Ill: NCTE, 1967.



7See Labov, Cohen and Robins, vo. cit., p.40.

See P. Rosenbaum, "Prerequisites for Linguistic Studies on the Effects of Dialect Differences on Learning to Read". Project Literacy Reports No. 2, 1964.

9See W. Stewart, "Social Dialect", Research Planning Conference on Language Development in Disadvantaged Children. New York: Yeshiva University, 1966.

10 This argument is a rather unsatisfactory suggestion on our part; we know of none that has been proposed soricusly so far.

It is obvious that only unstressed forms are contracted with the preceding item. There are many reasons to believe that contraction precedes deletion of the cepula (e.g., the argument concerning it's, that's, what's above; the fact that phonological rules operate upon the clusters and finals produced by contraction and therefore contribute to deletion). All of these arguments reinforce the view that the deletion of the copula is a very late rule.

12 "Reversal of the auxiliary and subject" is used here as shorthand for reversal of the tense marker, together with the next element of the auxiliary if there is one. For some of the standard rules on negative attraction, see Klima, Edward S. "Negation in English", in Fodor, J.A. and J.J. Katz (Eds.) The Structure of Language. Englewood Cliffs, N.J.: Prentice-Hall, 1964.